

Celiac Disease: A Concern Even Later in Life Dec 2009

For years, celiac disease—an autoimmune disorder marked by sensitivity to gluten, a protein in wheat and some other grains—was thought to be primarily a childhood ailment. But researchers are discovering that, because its symptoms can be subtle, the disorder can often go undetected in adults. And a new study suggests that celiac disease can even appear for the first time in older adults.

"We are seeing many more people diagnosed with celiac disease later in life," says H. Franklin Herlong, M.D., Associate Professor of Medicine & Digestive Disease at the Johns Hopkins Bayview Medical Center and *Health After 50* Board Member. Consequently, whereas celiac disease was once thought to affect about 1 in 3,000 Americans, a recent estimate puts the prevalence at 1 in 133. Because there is a strong genetic component to celiac disease, the prevalence is highest in those with a positive family history (see box above).

If you are at risk for celiac disease or suspect you might have it, getting a proper diagnosis is vital. The disorder, if not managed, can have a significant impact on overall health.

A SMALL INTESTINE PROBLEM

When people with celiac disease eat foods containing gluten—which is found not only in wheat but also in rye and barley—the body's immune system attacks small, fingerlike protrusions, called villi, that line the small intestine. This permanently damages the villi and

What You Can Eat:

Grains Without Gluten

- Bean flours • Buckwheat • Corn •
- Flaxseed • Nut flours • Nut meals
- Oats • Potato flour • Soy flour
- Rice • Quinoa • Millet • Teff •
- Amaranth

Why the Body Reacts

What causes the immune system in people with celiac disease to react when they eat gluten? Experts aren't sure, but research suggests the following factors play a role:

Genetic predisposition One in 56 people who has a first-degree relative with celiac disease develops the disorder. And nearly 95% of people with celiac disease have the gene for human leukocyte antigen- (HLA-) DQ2 or HLA-DQ8, whereas only 30–40% of the general population express this gene.

Abnormal gut sensitivity Some researchers now suspect that people with celiac disease (and those with other autoimmune disorders) may have higher levels of intestinal permeability. If this is the case, gluten may be able to percolate through the intestine and interact with the gluten-sensitive immune system.

causes inflammation and scarring of the intestinal wall.

The villi play an instrumental role in the absorption of nutrients from food. Thus, celiac disease can interfere with absorption and prevent you from fully utilizing your intake of iron, calcium, vitamin D, vitamin B₁₂, and other nutrients crucial for a wide range of benefits, from bone growth to healthy cognitive function. If not treated, celiac disease can cause a number of problems related to these nutritional deficits, including anemia, osteopenia (thinning of the bones), neuropathy (nerve disorder causing pain, numbness, and tingling in extremities), and chronic fatigue.

THE SIGNS

The classic symptoms of celiac disease are diarrhea, indigestion, abdominal pain, bloating, and weight loss. But sometimes the symptoms are not obvious. "Celiac disease can vary tremendously in severity," says Dr. Herlong, "and people can go for years without it being diagnosed." A study published in *Digestive and Liver Disease* found that among more than 2,000 adults ages 52–74, 2% of participants were diagnosed with celiac disease—a much higher number, on average, than previously stated for adults. Most of the subjects had mild to no symptoms.

A lack of clear symptoms may not be the only reason diagnosis can

be delayed. Some researchers theorize that the microbes living in the digestive tract can change as people grow older, which may influence the genes that are active and, in turn, cause a person to become gluten sensitive. In a recent study published in *BMC Gastroenterology*, researchers tested nearly 3,000 older adults for celiac disease and tested them again five years later. They found five new cases among people who had first tested negative; only two had symptoms.

Fortunately, older people who have gone undiagnosed for years usually have a milder form of the disease, with less damage to the small intestine, than people who develop symptoms when they are young.

LIVING GLUTEN FREE

If you have symptoms suggesting celiac disease, see your primary care provider for a blood test to check for the presence of specific antibodies that are unleashed when the immune system is activated by gluten. If this test is positive, a diagnosis of celiac disease must be confirmed by a biopsy of your small intestine to determine if the villi are damaged.

The only treatment for celiac disease is eating a gluten-free diet. At first this can seem daunting, since many common foods, including pas-

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pling anxiety and panic attacks that can exacerbate COPD symptoms. All patients therefore meet regularly with a licensed therapist or psychologist to learn techniques to manage anxiety and depression.

Help with medication. People with COPD usually take bronchodilators—medications that make it easier to breathe by relaxing the bronchial muscles—and frequently use supplemental oxygen. Patients receive detailed instructions on how to use inhalers and oxygen equipment correctly.

GETTING STARTED

Entering pulmonary rehabilitation requires a referral from your primary care physician or pulmonary specialist. Most patients who enter have severe COPD—defined as scoring below 50% on the forced expiratory volume during the first second of exhalation (FEV₁) test, which indicates that your

lung function is about half of what it should be.

Before starting, your doctor will likely perform an exercise stress test to evaluate your cardiac function. This is to make sure you are healthy enough for physical activity, which can be intense during pulmonary rehabilitation. Most programs meet three times per week for six to 12 weeks; during this time, approximately half of each four-hour rehab session will consist of exercise. (Because of the demands of exercise training, people with uncontrolled heart disease and unstable angina typically are not candidates for pulmonary rehab.)

STICKING WITH IT

After you finish pulmonary rehab, you can maintain the progress you've made only by continuing with the routine established by your rehab team. To do this, consider joining a maintenance program.

Typically offered in conjunction with rehab programs, maintenance programs consist of sessions twice a week. Unlike pulmonary rehabilitation, however, maintenance programs are not covered by Medicare or most major insurance, but they are very affordable and probably won't cost you any more than a membership at your local gym. (The maintenance program for pulmonary rehabilitation at Johns Hopkins, for instance, is \$60 per month, which works out to \$7.50 per session.) 

FOR MORE INFORMATION

• **American Lung Association**
(800) LUNG-USA (586-4872)
www.lungusa.org

• **American Association of Cardiovascular and Pulmonary Rehabilitation**
(312) 321-5146
www.aacvpr.org

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tas, breads, and baked goods, contain gluten, as do many over-the-counter and prescription medications and nutritional supplements. Also, gluten-laden flour is often used as a base for sauces and meals at restaurants, so it can be hard to avoid gluten when eating out.

The good news is that within a few days of eating gluten free, your small intestine will begin to heal. And going gluten free needn't be overly difficult or expensive, as long as you focus on eating "whole" foods, explains Gerard Mullin, M.D., Associate Professor of Medicine at Johns Hopkins Medical School, and nutritionist Kasia Kines, M.S., C.N.S., L.D.N., with the Johns Hopkins Integrative Medicine & Digestive Center.

"I see most people who desire to be 100% gluten free select high-end, specialty gluten-free grain products, like muffins, cookies, breads, and prepared

meals, at stores," says Dr. Mullin. These products can be very expensive—and are unnecessary, since whole foods that are naturally gluten free, such as brown rice, buckwheat grits, quinoa, and potatoes, are cheaper and just as good for you, explains Ms. Kines.

Once you change your diet, also make sure to include vegetables, legumes, fruits, nuts, seeds, and lean meats in your daily meals. You can also take a B-complex vitamin or a multivitamin to supply the vitamins that are usually in fortified wheat products, says Dr. Mullin. But this is only necessary if you don't get these nutrients from your diet alone.

"The necessity to go gluten free actually brings back the pleasure of eating nourishing and tasty meals, and patients often experience a sense of wellness and satisfaction they have not felt before," adds Ms. Kines. "This may be the best way they have ever eaten." 

DRUGSTORE AISLE

► **Certolizumab pegol (Cimzia)**—a new type of medication in a class of drugs called TNF inhibitors—was just approved for Crohn's disease. Evidence indicates it may also help patients with rheumatoid arthritis (RA) that has not improved with conventional treatment. Researchers randomly assigned 982 RA patients who hadn't responded to methotrexate alone (the gold-standard drug for RA) also to receive an injection of 200 or 400 mg of certolizumab or a placebo every other week. After just one week, physical function started to improve among patients who took certolizumab with methotrexate; one year later, x-rays revealed that joint degeneration had stopped in about 70% of these patients.

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